

## Laboratory

## **DIGITALIS**

**Agent Overview:** Digitalis is often used as a therapeutic heart drug and a traditional

diuretic. Derived from the Foxglove plant (not just the leaves), it is considered a cardiac glycoside. Signs and symptoms of acute digitalis (digoxin or digitoxin) poisoning by ingestion include nausea and vomiting, high blood calcium (hyperkalemia), and cardiovascular

effects, including cardiac dysrthmias and fibrillations

(bradydysrhythmias, tachydysrhythmias, ventricular tachycardia/fibrillation, or atrial tachycardia). Sheep-derived IgG antibodies to digoxin are used successfully in patients with oleander toxicity as an antidote. Digitalis can be detected in urine, serum, or plasma, or in environmental samples by some commercial laboratories.

Lab Specimen Submittal: Authorization by Dr. Jane Getchell, Director DPHL; Christina

Pleasanton, Deputy Director DPHL; or Tara Lydick, Chemical Terrorism

Coordinator.

**Type of Specimens** Urine: 25mL-50mL screw-cap container

Necessary for Testing: Whole blood:

- Three, 5 or 7 mL purple-top (EDTA) tubes (vacuum fill only) AND

- One, 5 or 7 mL gray-top or green-top (vacuum fill only) AND

- Two empty urine cups and two empty blood tubes for each lot #

submitted.

Packaging Instructions: <u>Urine</u>: freeze specimen upon collection and ship on dry ice; label

specimens and package individually; wrap with absorbent material.

<u>Whole blood</u>: place filled tubes in a shipping rack for stability, wrap the tubes in absorbent material, and secure with tape. Place the packaged tubes in a secondary unbreakable container. Specimens may be

shipped cold but *must not* be frozen.

<u>All:</u> wrap sample containers and layers with tamper-proof, waterproof forensic evidence tape initialed by collector, being careful not to cover the sample labels. Ship to DPHL as Biological Substance, Category B

(Packing Instruction 650).

**Receiving Specimens** 

at DPHL:

Authorized specimens are received at the lab's rear (loading dock) entrance. Submitters must present ID and complete proper forms.

**Handling of Specimens:** Follow chain of custody procedures. Freeze urine specimens.

**Reporting Results:** Reference laboratory will notify DPHL as soon as possible. The

Potential Exposure Call Log and Information form will provide information for notification of testing results outside of the DPHL.

**Contact Information:** Jane Getchell, DrPH, Director DPHL, 302-223-1520 (24/7 coverage)

**24/7 Emergency Contact Number: 1-888-295-5156** 

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